

P-Patch Community Gardening Program

Making Gardens Accessible for All

Tip

PP307

3/20/2014

P-Patch TIPS are reference documents that address topics related to the development and ongoing management of P-Patch Community Gardens.

P-Patches are designed to be inclusive and engaging amenities for all individuals. Accessible gardens are designed to allow direct participation of people of all ages and abilities. When making improvements or for new construction all design and capital projects on City of Seattle property are required by federal law to provide readily accessible facilities per the Americans with Disabilities Act (ADA).

What does that mean for you building a P-Patch Community Garden? P-Patch requires at a minimum at new or redeveloping gardens accessible gardening beds, tool storage of some kind, water source and clear pathway to and in gathering area. When possible we strongly encourage designs that allow movement through the whole garden for all abilities. Site topography and overall size of the garden will dictate level of accessibility and available space for gardening.

Site Considerations

Location of Beds: Garden beds should be located close to garden entrances, near parking drop off areas, tool storage, and adjacent to a water station. The access pathway to the beds should be flat and not require travel along any slopes. Turn-around areas should have 6' x 6' available at both ends of the beds, and the minimum dimensions for pathways should be 48" for single wheelchairs.

Pathways & Surfaces: Must be firm, stable and slip resistant. Walkable surfaces should try to be no steeper than 1:20 (1' rise in 20') or 5% maximum, with a cross slope maximum of 2% or 1:48.

- Pathways to accessible area should be no less than 48".

Accessible Path Materials: For gravel foundation should be 4 inches of 5/8" minus, compacted to 90 - 95%. Top surface should be 1" - 2" of 1/4" to dust or 1/4" minus gravel.



Raise beds, such as this one at Eastlake, can make gardening

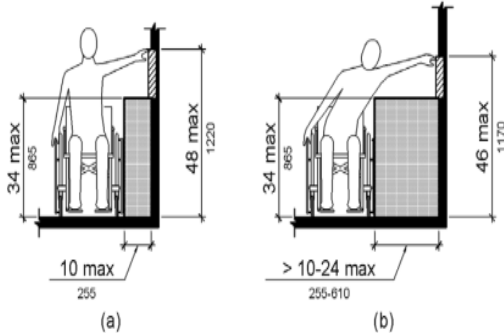
- **Gravel must be angular versus round.** Pavers: Foundation should be 4 inches with a compacted base to lay bricks/pavers on level. Watch for Changes in Level 1/4" to 1/2" max depending if it has a bevel, and then gaps can only be 1/2" maximum, joints between the pavers could end up being firm and stable enough that a wheel would not get stuck.
- **Rest and Gathering Areas:** Should be accessible to everyone. Tables should permit wheelchairs to roll under and be comfortable for older adults. Consider adding benches in walkways for resting.
- **Drop-off Areas/Parking:** If possible but not required, should be near the accessible areas, with safe areas for transfer in/out of vehicles, and designated parking. There should be no grade change between roadway and garden entrance unless ramps and curb cuts are used. Ramps (when steeper than 1:20 is required) should not be steeper than 1:12 (1'rise in 12') or 8.3% maximum. Ramps should not go longer than 30' (or rise 30") before a flat landing is created.



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- **Water:** Should be placed close to garden beds, should come out of raised spigot 24" - 36", a light-weight hose should be easily accessible, and hand levers rather than round handles should be used to make it easier to turn on water. Drainage should be considered as not to drain onto the person doing the watering. Water barrels may be placed nearby ADA modified plots if the plots cannot be situated adjacent to watering stations.
- **Tool Shed Modifications:** At a minimum you are required to provide a way to store tools used at accessible beds. The tool shed should be located as close as possible to the accessible beds and have level, solid surface pathways leading to it. For wheelchair access within a general shed, the doors must be at least 48". You should allow 60+" inside to allow for a 360° turn. Tools and work-bench tops should be stored no higher than 44"-



48" and no lower than 18", reach depth should not exceed 20" with no obstruction in front.

General Garden Bed Considerations

There are a number of different options for creating accessible garden beds. The type chosen is dependent upon the specific needs of each garden and its community. Square feet of gardening space is based on overall size of garden.

The bulk of accessible beds fall into three categories: walker, wheelchair, and table-top raised garden beds. Planters are elevated containers which have bottoms that permit drainage.

General Raised Bed Considerations: Side walls of beds should be constructed as thin as possible due to the limited reach of the seated gardener. If the intent is to enable gardeners to sit on the bed, the platform should be a minimum of 12" wide.

All beds/planters must be stable enough so they won't tip over and can be used for support. The beds should contain enough soil volume to support mature plants and not dry out too quickly.

- **Walker Modified Beds:** Should have a maximum height of 35", a maximum width of 36", and be designed with a 24" soil depth in mind (with any remaining depth filled with crushed gravel to facilitate drainage). Ideally, the beds would be outfitted with handrails around the perimeters.
- **Wheelchair Modified Beds:** Should have a maximum height of 24" and a maximum width of 12" (though if accessible from two sides the width can be 24"). Ideally, wheelchair modified beds will taper out from the bottom in order to accommodate room for legs/feet while seated and allowing head-on access rather than to-the-side access.
- **Table-top Style Beds:** (These types of beds are helpful for those with limited sight.) If this style is chosen, be aware of the following considerations. A north-south orientation for the planter is best for low-growing crops. Drilling 1/2-inch holes every 6 inches across the base promotes good drainage, and lining the planting bed bottom with a landscaping fabric before adding the soil mix allows only the water to drain through the holes. Secure the footings into the ground with cement for best stabilization. Table-top gardens can help the visually impaired by bringing the garden closer to eye level, while permitting those in chairs to wheel under.



Garden Bed / Planter Material Considerations:

- **Wood or Block Raised Beds:** Other gardens have built tall planter boxes out of wood, Cinder blocks, landscape edging blocks, stone, bricks, and poured concrete are other choices.
- **Metal Troughs:** A common approach is to purchase metal water troughs from feed stores and fill them as planters. They come in many sizes, shapes, and prices. Some gardens have raised these up on wood blocks to create a more optimal height. Seating should be considered.
- **Alternative/Additional Modifications:** Container gardening may be one alternative to consider as it allows for ease of access with a minimum of construction know-how.
- **Soil:** Should be loose, light and well-drained to enable weakened hands to work in without strain. Good soil may be derived from mixing equal parts topsoil, sand and compost. Test the soil mixture for nutrients and pH, and add lime or sulfur to bring the pH to about 6.0 - 6.5. When filling the planter bed, remember to allow space for 1 to 2 inches of mulch on top of the soil.

Tools

Most tools can be modified with D-grips or T-grips, telescopic handles, and/or various other modifications to facilitate ease of use for seated gardeners and for gardeners with limited gripping strength. Modified tools might be stored in accessible containers adjacent to modified plots if situation of the tool shed cannot accommodate ease of wheelchair or walker access.



Hearing and Sight

When designing your garden think about all levels of ability.

Does a Gardener Need Special Accommodations?

The P-Patch Program, subject to reasonable fiscal and site limitations, shall provide reasonable accommodations to the public, on request, for physical and gardening access, communications, or other needs in order to allow participation of people with disabilities in services, programs, and activities.

Gardeners may make a request for a reasonable accommodation to the P-Patch program based on a disability. For more information please contact P-Patch staff.

Additional Resources

- **Buehler Enabling Garden:** http://www.chicagobotanic.org/explore/enabling_features.php
- **American Community Gardening Association:** <http://www.communitygarden.org/learn/faq.php#options>
- **Office of Civil Rights:** <http://www.seattle.gov/civilrights/disability.htm>
- **Seattle City ADA Compliance and Resources:** <http://www.seattle.gov/contracting/ada.htm>
- **2010 ADA Standards for Accessible Design:** http://www.ada.gov/2010ADASTandards_index.htm

Literature

- **Enabling Garden: A Guide To Lifelong Gardening** by Gene Rothert
- **Accessible Gardening for People With Physical Disabilities: A Guide to Methods, Tools, and Plants** by Janeen R Adil

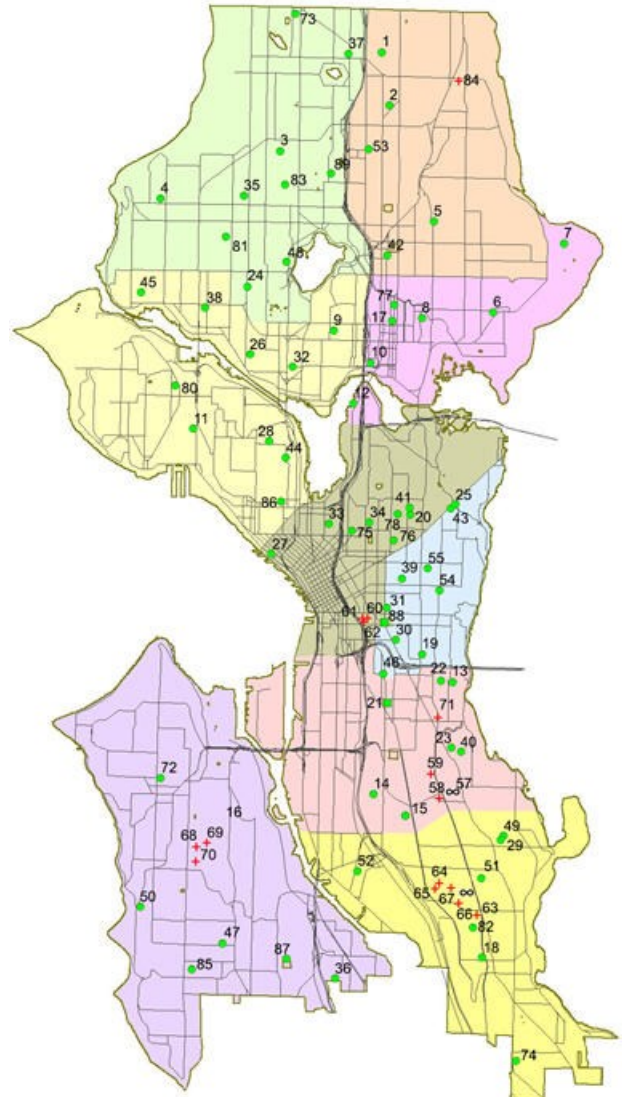


P-Patch Community Gardening Program

Accessible Beds in P-Patch

◆ Accessible raised beds

Northwest <ul style="list-style-type: none"> ◆ 4 Ballard-JB 8527 25th Ave NW ◆ 73 Bitterlake-KF Linden Ave N.S. N 143rd St 3 Evanston-KF 604 N 101st St 35 Greenwood-JB 345 NW 88 St ◆ 83 Greenwood Station-JB Fremont Ave N & N 89th St ◆ 37 Haller Lake-KF 13045 1st Ave NE ◆ 81 Kirke Park-JB 7025 9th Ave NW 48 Linden Orchard-KF Linden Ave N.S. N 67th St □ 89 Loflon Springs-KF College Way & 92nd St 24 Phinney Ridge-KF 5926 3rd Ave NW 	Downtown <ul style="list-style-type: none"> 27 Belltown-3P Elliot Ave & Vine St. 33 Cascade-3P Minor Ave N & Thomas St 78 Broadway Hills-3P Federal Ave E & E Republican ◆ 76 Howell Collective-3P 18th Ave E & E Howell St □ 88 Honolulu Park-LR Boren Ave & Yesler St ◆ 41 Pelican Tas-3P 1909 E Roy St. (Alley location) 20 Republican-3P 20th Ave E & E Republican St ◆ 34 Thomas Street Gardens-3P 1010 E Thomas St 75 Unwaving Paradise-3P Summit Ave E & E John St + 60 YT Playground-LR 929 Washington St. S + 61 YT Ballpark Garden-LR 819 8th Ave S + 62 YT Freeway Garden-LR 8 Main St. & H5 	Northeast <ul style="list-style-type: none"> ◆ 1 Jackson Park-KF 13048 10th Ave NE + ◆ 84 Lake City Court-KF 12536 33rd Ave NE 53 Maple Leaf-KF 5th Ave NE & NE 103rd ◆ 5 Placido Farm-RM 8040 25th Ave NE ◆ 2 Pinelands-KF 11525 12th Ave NE ◆ 42 Roosevelt-KF 7012 12th Ave NE
Ship Canal West <ul style="list-style-type: none"> 32 Fremont-KF 3935 Woodland Park Ave N 9 Good Shepherd-KF 4618 Bagley Ave N 38 Greg's Garden-JB 14th Ave NW & NW 54th St 26 Hazel Heights-KF Baker Ave NW & NW 42nd St ◆ 11 Interbay-3P 2451 15th Ave W ◆ 80 Magnolia Manor Park-3P 3500 28th Ave W 28 Queen Anne-3P 3rd Ave N & Lynn St ◆ 44 Queen Pass-3P 5th Ave N & Howe St ◆ 45 Thyme Patch Park-JB 2655 NW 58th St ◆ 86 UpGarden-3P 3rd Ave N & Roy St 	Central East <ul style="list-style-type: none"> 46 Beacon Bluff-LR 1201 15th Ave S 30 Climbing Water-LR 800 Hewetta Pl. S ◆ 54 Hawkins-KF 504 Martin Luther King Jr. Way 25 Ida Mib-3P Madison St. & Lake Washington Blvd. (Alley location) ◆ 39 Immaculate-LR 18th Ave E & E Columbia St 19 Judkins-LR 24th Ave S & S Norman St 43 Mad-R-3P 3000 E Mercer St ◆ 55 Spring Street-KF 25th Ave E & E Spring St 31 Squire Park-LR 14th Ave & E Rv St 	Ship Canal East <ul style="list-style-type: none"> 6 Burke-Gilman-KF Sand Point Way NE & NE 52nd ◆ 12 Eastlake-3P 2900 Rainier Ave E ◆ 7 Magnuson-KF Sandpoint Way NE & NE 70th 8 Ravens-KF 5200 Ravenna Ave NE 77 Ship's Garden-3P 5522 University Way NE ◆ 10 University District-3P 4009 8th Ave NE ◆ □ 17 University Heights-3P 5031 University Way NE
Southeast <ul style="list-style-type: none"> ◆ 51 Angel Morgan-JB 3956 S Morgan St ◆ 49 Brandon Street Orchard-JB 4825 S Brandon St ◆ 29 Hillman City-JB 4613 S Ludie St 82 John C Little-BY 37th Ave S & S Willow St ◆ 74 Leo Farm-LR 51st Ave S & S Leo St + 64 NH Lucky Garden-BY Shaffer Ave S & S Holly St + 65 NH 28-BY 29th Ave S & S Brighton St + 68 NH Power Garden-BY 7139 Holly Park Dr. S + ◆ 67 NH Youth & Family-KF 32nd Ave S & S Brighton St + 63 NH Rookery-BY Holly Park Dr. S & 40th Ave S NH Rookery Market-BY-JB Holly Park Dr. S & 40th Ave S ◆ 52 Oxbow Park-LR 6400 Colson Ave S 18 Thistle-BY MLK Jr. Way & Cloverside 	Greater Duwamish & SE Seattle <ul style="list-style-type: none"> 22 Bradner Gardens Park-BY 1750 S Bradner Pl. (23rd Ave S) □ 21 Beacon Food Forest-3P 15th Ave S & S Dakota St 13 Colman Park-LR 1716-23 32nd Ave S 40 Courtland Place-JB 3800 36th Ave S 23 Eckelle Street-JB 3400 Rainier Ave S 15 Max nyel lal ndale-JB 4913-23 Columbia Dr. S + 71 Hillside Garden-BY MLK Jr. S & S McClellan + 57 RV Sunrise Garden-JB 8. Oregon St. & 33rd Ave S + ◆ 53 RV Snoqualmie Senior-JB 2917 S Snoqualmie + 59 RV Dakota West-JB 2902 S Dakota St 14 Snoqualmie-JB 4549 13th Ave S 	West Seattle <ul style="list-style-type: none"> ◆ 85 Barton Street-LR 34th Ave SW & SW Barton St ◆ 16 Delridge-BY 5078 25th Ave SW + 70 HP Commons Park-BY 32nd Ave SW & SW Graham St + 68 HP Junaeu-BY 8W Junaeu & 32nd Ave SW HP Junaeu Market-BY-JB 8W Junaeu & 32nd Ave SW + 69 HP MacArthur Park-BY 2726 MacArthur Lane 50 Lincoln Park-LR 7400 Reuniter Way SW 47 Longfellow Creek-LR 25th Ave SW & SW Thistle St 36 Mima Farm & Market-BY 9026 4th Ave S ◆ 87 Westcrest Park-LR 8th Ave SW & SW Henderson St 72 West Genesee-BY 41st Ave SW & SW Genesee St



Key	
◆	Accessible raised beds
●	Collective (no individual plots)
□	New Sites: construction/design 2013-14
Public Housing Sites Resident Priority	
RV	Rainier Vista
YT	Yesler Terrace
NH	New Holly
HP	High Point

Updated 2013/12/3